

Notice of Allowability

Application No.

10/000,127

Examiner

Ardith E. Hertzog

Applicant(s)

TANAKA ET AL.

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 10/14/2004.
2. ☒ The allowed claim(s) is/are 1-8, now numbered, 1, 4, 5, 2, 3, 6 & 7, respectively.
3. ☒ The drawings filed on 10/14/2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT/REASONS FOR ALLOWANCE

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR § 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Shuji Yoshizaki on December 6, 2004.

In the specification:

In applicant's amendment to the paragraph beginning at page 18, line 5, filed October 14, 2004, in the first line of said paragraph, each occurrence of "_" has been deleted.

In applicant's amendment to the paragraph beginning at page 21, line 22, filed October 14, 2004, in the first line of said paragraph, each occurrence of "_" has been deleted.

In applicant's amendment to the paragraph beginning at page 22, line 21, filed October 14, 2004, in the first line of said paragraph, each occurrence of "_" has been deleted.

In the claims:

In claim 1, at line 1, "solid material of a" has been deleted, and ---solidified,--- has been inserted thereof.

In claim 1, at line 3, after "(IV)", a comma has been inserted.

In claim 1, at line 3, "of 10 to 30 weight%" has been deleted.

In claim 1, at line 4, after "vanadyl sulfate (IV)", ---in an amount of 10 to 30 weight%--- has been inserted.

In claim 3, at line 1, "solid material of the" has been deleted, and ---solidified,--- has been inserted thereof.

In claim 4, at line 1, "solid material of the" has been deleted, and ---solidified,--- has been inserted thereof.

In claim 5, at line 1, "solid material of the" has been deleted, and ---solidified,--- has been inserted thereof.

In claim 6, at line 1, "solid material of the" has been deleted, and ---solidified,--- has been inserted thereof.

In claim 7, at line 1, "solid material of a" has been deleted, and ---solidified,--- has been inserted thereof.

In claim 7, at line 4, after "(IV)", a comma has been inserted.

In claim 7, at line 4, after "solidified", ---, wherein said solidified, modified vanadium compound contains excessive sulfuric acid other than the sulfate group composing the vanadium sulfate (III) or the vanadyl sulfate (IV) in an amount of 10 to 30 weight%--- has been inserted.

In claim 8, at line 1, "solid material of a" has been deleted, and ---solidified,--- has been inserted thereof.

In claim 8, at line 3, after "(IV)", a comma has been inserted.

In claim 8, at line 5, after "solidified", ---, wherein said solidified, modified

vanadium compound contains excessive sulfuric acid other than the sulfate group composing the vanadium sulfate (III) or the vanadyl sulfate (IV) in an amount of 10 to 30 weight%--- has been inserted.

Claims 9 and 10 have been cancelled *without prejudice*.

3. The following is an examiner's statement of reasons for allowance: The amendment filed October 14, 2004, **in concert with** the examiner's amendment above, has **overcome** the objections to the abstract, drawings, and disclosure, as set forth in, respectively, paragraphs 5., 6. and 8. of the prior Office action with mailing date July 14, 2004 (hereinafter "the 7/14/04 action"). **In addition, all** prior art rejections of the claims, as set forth in paragraphs 11. - 15. of the 7/14/04 action, have been **overcome/with-drawn**, given applicant's amendment to the claims and arguments regarding same, **in concert with** the examiner's amendment above. Specifically, the limitations of former claim 2 have now been incorporated into instant independent claim 1, thus having **overcome** the 35 U.S.C. § 102(a) and 35 U.S.C. § 102(e)(1) rejections of claims 1, 3 and 4 as being anticipated by Tanaka et al. (US 6,613,298 B2), **and** the 35 U.S.C. § 102(b) rejection of claims 1, 3 and 4 as being anticipated by Sato et al. (US 5,368,762). **Furthermore**, the prior 35 U.S.C. § 102(b)/35 U.S.C. § 103(a) rejection of former claim 2 based upon Sato et al. (i.e., as set forth in paragraph 14. of the 7/14/04 action), **cannot** be made against instant claim 1, **as amended**, especially given applicant's arguments concerning same. For not only is instant claim 1 now drawn to applicant's "**solidified**, modified vanadium compound" (emphasis added), whereas Sato et al. teach vanadium electrolytic **solutions**, but applicant has **also** demonstrated that "the

contents of the sulfuric acid in the vanadium solutions, specifically disclosed as Examples 1-4 of Sato et al., are **outside the claimed range** of the present invention” (see remarks accompanying applicant’s amendment at p. 11, first and second paragraphs, emphasis added). **Analogously**, with instant claims 5 and 6 dependent upon instant claim 1, **as amended**, the prior 35 U.S.C. § 103(a) rejection of these claims as being unpatentable over Sato et al. (i.e., as set forth in paragraph 15. of the 7/14/04 action), **cannot** be made; **analogously**, with the limitations of former claim 2 now incorporated into instant independent claims 7 and 8, the prior 35 U.S.C. § 103(a) rejection of these claims as being unpatentable over Sato et al. (i.e., as set forth in paragraph 15. of the 7/14/04 action) **cannot** be made. To summarize, Sato et al. (considered the closest prior art of record) provide no teaching nor suggestion of **solidifying** vanadium compounds from the disclosed vanadium solutions, in order to obtain **solidified “modified”¹** vanadium compounds, per applicant’s independent claims 1, 7 and 8, **as amended—namely, “vanadium sulfate (III), or a mixed vanadium compound of vanadium sulfate (III) and vanadyl sulfate (IV), [which] contain... excessive sulfuric acid other than the sulfate group composing the vanadium sulfate (III) or the vanadyl sulfate (IV), in an amount of 10 to 30 weight%”** (emphasis added). **Lastly**, were it assumed *arguendo* that Sato et al. **did** generally suggest such range of “excessive sulfuric acid” for solidified vanadium compounds—though it is reiterated that the examiner now **agrees** with applicant that

¹ It is noted that applicant clearly defines what is meant by the term “modified” in the specification (see instant page 9, last full paragraph).

this patent provides **no** such suggestion—**applicant has demonstrated unexpected results in water solubility in instant Table 3** (i.e., as discussed in remarks accompanying applicant's amendment at p. 11, last paragraph), such data now considered reasonably commensurate in scope with instant claims 1 and 3-8, **as amended**. **Thus**, applicant's claims must now be deemed allowable over the prior art of record.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or any earlier communications from the examiner should be directed to Ardith E. Hertzog at telephone number (571) 272-1347. The examiner can normally be reached on Monday through Friday (from about 8:00 a.m. - 4:00 p.m.).

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman, can be reached at (571) 272-1358. The fax phone number for the organization where this application is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

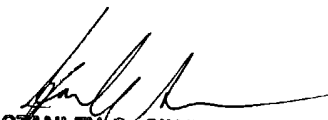
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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. For any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


AEH

December 6, 2004


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